



IN THE U.S. PATENT AND TRADEMARK OFFICE

In re U.S. Patent Application of:

APPLICANT: S. Kalajo et al.

SERIAL NO.: 10/651,910

FILING DATE: 29 August 2003

EXAMINER: Mehrpour, N.

ART UNIT: 2617

ATTORNEY'S DOCKET NO.: 875.0124.U1(US)

TITLE: Method and Apparatus Providing Integrated Load Matching Using Adaptive Power Amplifier Compensation

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PRE-APPEAL BRIEF REQUEST FOR REVIEW ATTACHMENT

The following is a concise recitation of clear errors in the Examiner's rejections in this application.

Claims 1-25 are pending. All pending claims stand rejected under 35 U.S.C. §102(e) as being anticipated by Pehlke (US 2005/0032488 A1) (hereinafter, Pehlke). It is respectfully submitted that Pehlke does not qualify as prior art under 35 U.S.C. §102(e). Further, while Pehlke is a continuation-in-part of U.S. Patent Application Serial No. 09/813,593, now U.S. Patent No. 6,785,521, by Hadjichristos et al., the Examiner rejects the claims of the instant application by using new matter in Pehlke. The new matter in Pehlke does not derive the benefits of the filing or other dates of Hadjichristos and therefore the Examiner is using material in Pehlke that does not qualify as prior art under 35 U.S.C. §102(e).

35 U.S.C. §102(e) states the following:

the invention was described in — (1) *an application for patent*, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) *a patent granted* on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international

application designated the United States and was published under Article 21(2) of such treaty in the English language;

35 U.S.C. §102(e) (March 2006) (emphases added). Section (2) of 35 U.S.C. §102(e) relates to a granted patent, and Pehlke is not a granted patent. Therefore, section (2) is inapplicable to Pehlke. Section (1) of 35 U.S.C. §102(e) states that an application may fall under this section if the application (i) has been published under §122(b), (ii) is by another and (iii) was filed in the United States *before* the invention by the Applicant. Applicants' date of invention is — by definition — at least the date of filing the application, which is **29 August 2003**. By contrast, Pehlke was filed on **12 July 2004**.

As Pehlke's date of filing (12 July 2004) is *after* the Applicants' date of filing (29 August 2003), Pehlke does not qualify as prior art under 35 U.S.C. §102(e). It should also be noted that Pehlke does not qualify as prior art under any other section of 35 U.S.C. §102.

As stated above, Pehlke is a continuation-in-part of U.S. Patent Application Serial No. 09/813,593, now U.S. Patent No. 6,785,521, by Hadjichristos et al. (hereinafter, Hadjichristos). Hadjichristos issued on 31 August 2004, but was published on 26 September 2002 as U.S. Patent Application No. 2002/0137480 A1.

Applicants have compared Pehlke and Hadjichristos and have determined that at least paragraphs [0060]-[0083] and [0094] and FIGS. 10-14 of Pehlke include new matter as compared to Hadjichristos. These paragraphs therefore receive the filing date of Pehlke and do not receive benefit of the earlier filing or other dates associated with Hadjichristos. These paragraphs will be referred to herein as the "new matter paragraphs".

In the outstanding final Office Action, dated 16 May 2006, the Examiner uses at least the new matter paragraphs [0060], [0064]-[0066], [0079]-[0082] of Pehlke to reject independent claims 1, 9, 17, 20, and 21. Certain of the dependent claims are also rejected using the new matter paragraphs of Pehlke. For instance, the Examiner uses new matter paragraphs [0072] and [0073] to reject dependent claims 2 and 10 and uses new matter paragraph [0060] to reject dependent claims 3 and 11.

Pehlke does not qualify as prior art against the instant application under 35 U.S.C. §102(e). Although some of the subject matter in Pehlke appears to be disclosed in

Hadjichristos, the Examiner in the final Office Action uses at least some of the new matter paragraphs from Pehlke to reject the claims herein, where the new matter paragraphs do not receive benefit of the earlier filing or other dates associated with Hadjichristos.

Consequently, Applicants respectfully submit that the outstanding rejections using Pehlke under 35 U.S.C. §102(e) are incorrect. These rejections should be withdrawn.

Furthermore, even if Pehlke is prior art under 35 U.S.C. §102(e), an element of each of the independent claims 1, 9, 17 and 21 is, as in claim 1:

compensation circuitry for controlling the generation of a plurality of power amplifier bias current and bias voltage signals to have values that are a function of the values of the first and second detection signals, **and the current output power level of the power amplifier module.**

There is no similar teaching in Pehlke, and no suggestion of the claimed subject matter. This fact alone should be sufficient to traverse the rejection applied under 35 U.S.C. 102(e).

Independent claim 20 recites in part that a RF power amplifier is contained within a package and is operable:

over a range of output power levels specified by a value of a power control signal that is one of applied to a first input of the package and generated internally to the package, the RF power amplifier comprising at least one output transistor having an input coupled to second input of the package for receiving an input RF signal and an output coupled to an output of the package for outputting an amplified RF signal, the RF power amplifier further comprising circuitry integrated with the at least one output transistor for automatically compensating the RF amplifier for impedance variations appearing at the first output, the circuitry comprising detection circuitry for generating detection signals indicative of current flowing through the at least one output transistor and of a voltage appearing at the output of the at least one output transistor, and further comprising load line compensation circuitry responsive to the detection signals **and to the power control signal** for maintaining a desired output linearity of the amplified RF signal.

As is stated at page 9, lines 10-13, of the instant specification:

In addition, the power detector 30, 32 outputs are matched to the internal (or external) reference voltage V_{ref} . The value of V_{ref} is proportional to the desired output power from the PA. That is, during normal operation the value of V_{ref} varies up and down, depending on the PA output power.

Pehlke do make a reference to V_{REF} , but in the following context (see, for example, paragraph 0078):

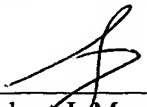
The voltage drop across the reference regulating transistor 40A, e.g., the drain-to-source drop if 40A is a FET, is sensed and amplified by a factor A_{VREF} by amplifier 60, and compared against the corresponding voltage drop across the PA's regulating transistor 40B, which is sensed and amplified similarly by a factor A_{VPA} by amplifier 62. These sensed and amplified voltages, which represent the relative instantaneous headroom to the supply voltage upper rail of each branch, are then compared in amplifier 64 and used to lock the loop by driving the gate of transistor 40B, which regulates current into PA 12.

Reference can also be made to paragraph 0080 of Pehlke. Clearly the V_{REF} of Pehlke is not equivalent to the V_{ref} or V_{REF} disclosed in the instant patent application.

In rejecting claims 1, 9, 17, 20 and 21 the Examiner refers to paragraphs 0042, 0068, 0081, 0082 of Pehlke for purportedly teaching the "current output power level of the power amplifier module". These specific paragraphs of Pehlke are not seen to disclose or suggest the subject matter of the independent claims, e.g., as in claim 1: "compensation circuitry for controlling the generation of a plurality of power amplifier bias current and bias voltage signals to have values that are a function of the values of the first and second detection signals, **and the current output power level of the power amplifier module.**"

All of the independent claims are allowable over Pehlke and, thus, all of the dependent claims are allowable as well for at least this one reason alone.

Respectfully submitted:


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11/16/06
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